

III. REMARKS

A. Summary

In the present Office Action, claims 24-27 were examined and rejected. The Examiner has rejected claims 24-26 under 35 U.S.C. 102(b), claims 24 and 25 under 35 U.S.C. 102(e), and claims 25-27 under 35 U.S.C. 103(a). The Examiner has also objected to the amendment filed May 29, 2003 under 35 U.S.C. 132 as allegedly introducing new matter into the disclosure. Claims 1-23 are withdrawn from consideration as a result of Applicant's election response of December 17, 2002.

By this Amendment, claim 24 has been amended, claims 28-29 have been newly added, and claims 1-23 have been canceled without prejudice. Accordingly, claims 24-29 are presented for further examination. No new matter has been added. By this Amendment, claims 24-29 are believed to be in condition for allowance.

B. Explanation of Above Amendments

Withdrawn claims 1-23 have been canceled without prejudice in acknowledgement of the finality of the Examiner's restriction requirement. Cancellation of claims 1-23 does not constitute abandonment of that aspect of the present invention, and Applicant reserves the right to file a divisional application claiming that aspect of the present invention.

Claim 24 has been amended to overcome the Examiner's rejection under 35 U.S.C. 102(b) and (e), as is described in further detail hereinafter. The amendment to claim 24 finds support throughout Applicant's as-filed specification and claims. For example, FIG. 8 shows a jacket having a closed end forming a nose of the bullet, with the front (first) core 172 contained within the jacket and conforming to an interior surface of the nose. This is also described in the specification at page 6, lines 4-10.

Claim 28 has been newly added, and finds support throughout Applicant's as-filed specification and claims. For example, FIG. 8 shows the nose (first) core 172 having a rear

5 of 11

Serial No. 10/010,009
Dual Core Ammunition
Inventor: Henry J. Halverson
Attorney Docket No. 102167-200
Timothy J. Olson Reg. No.: 42,962
Dir. Tel. 860-297-3700
\\12868\8\437971.1

surface conforming to a front surface of the rear (second) core 174. This is supported by the specification at page 6, lines 7-9.

Claim 29 has been newly added, and finds support throughout Applicant's as-filed specification and claims. For example, page 5, lines 12-13, recites that the front core 172 consists of "a soft malleable material (e.g. having a hardness less than Brinell 10)".

C. Objection to Amendment filed May 29, 2003

The Examiner has objected to the amendment filed May 29, 2003 under 35 U.S.C. 132 as allegedly introducing new matter into the disclosure. More specifically, the Examiner alleges that there is no basis in the original disclosure for the sentence "In both preferred embodiments, the bullet can have a weight of 120-125 grains.", which was added as part of a new paragraph. The Examiner further alleges that the weight of 120-125 grains is supported only for the embodiment where the first core consists of at least 50 weight percent tin and the second core consists of at least 50 weight percent tungsten (the claim 24 embodiment).

Applicant has amended the specification as suggested by the Examiner. Accordingly, reconsideration and withdrawal of the objection under 35 U.S.C. 132 is respectfully requested.

D. Rejection Under 35 U.S.C. 102(b)

The Examiner has rejected claims 24-26 under 35 U.S.C. 102(b) as allegedly being anticipated by U.S. Patent 5,847,313 to Beal (Beal '313). This rejection is hereinafter traversed and reconsideration is respectfully requested for the following reasons.

Applicant has amended claim 24 to recite:

a jacket having *a closed end forming a nose of the bullet*;
a first core contained within the jacket, *the first core having a front surface conforming to an interior surface of the nose*; and
a second core contained within the jacket aft of the first core, the second core having a rear surface disposed at a rear end of the bullet;

6 of 11

Serial No. 10/010,009
Dual Core Ammunition
Inventor: Henry J. Halverson
Attorney Docket No. 102167-200
Timothy J. Olson Reg. No.: 42,962
Dir. Tel. 860-297-3700
\\12868\8\437971.1

Beal '313 fails to teach or suggest this limitation. Instead of teaching a jacket having a closed end forming a nose of the bullet, Beal '313 teaches a jacket 47 having a cap 51 disposed at the open end of the jacket 47, with the cap 51 forming the nose of the bullet, as can be seen in FIGs. 7 and 8 of Beal '313. Indeed, the method of manufacturing a bullet taught by Beal '313 requires the closed end of the jacket to be at the aft end of the bullet. In the method of manufacturing taught by Beal '313, the core 49 is first inserted in the jacket 47 followed by the cap 51, and then the assembly is placed into a die 50 having an ogival cavity 52. The cap 51 and the leading end 56 of the core, along with the leading (open) end of the jacket 47 are deformed as they are forced to conform to, and fill the ogival die cavity (see column 10, lines 24-32). Accordingly, Beal '313 fails to teach or suggest a jacket having a closed end forming a nose of the bullet, with the first core having a front surface conforming to an interior surface of the nose, as is recited in Applicant's claim 24.

Because Beal '313 fails to teach or suggest each and every limitation of Applicant's claim 24, Applicant respectfully requests that the rejection of claim 24, and dependent claims 25 and 26, under 35 U.S.C. 102(b) as being anticipated by Beal '313 be reconsidered and withdrawn.

With regard to claim 26, Beal '313 fails to teach that the second core comprises at least 95.0 weight percent tungsten-filled polymer. While Beal '313 mentions a micronized polyolefin such as polyethylene homopolymer, Beal '313 does not specifically teach that the second core comprises at least 95.0 weight percent tungsten-filled polymer. Indeed, in the Examiner's rejection of claim 26 under 35 U.S.C. 103(b), discussed hereinafter, the Examiner recognizes that "Beal 313 does not specifically state that the second core is a tungsten-filled polymer core." Accordingly, Beal '313 fails to teach each and every limitation of Applicant's claim 26, and, for at least this additional reason, Applicant respectfully requests that the rejection of claim 26 under 35 U.S.C. 102(b) as being anticipated by Beal '313 be reconsidered and withdrawn.

7 of 11

Serial No. 10/010,009
Dual Core Ammunition
Inventor: Henry J. Halverson
Attorney Docket No. 102167-200
Timothy J. Olson Reg. No.: 42,962
Dir. Tel. 860-297-3700
\\12868\\8\\437971.1

E. Rejection Under 35 U.S.C. 102(e)

The Examiner has rejected claims 24 and 25 under 35 U.S.C. 102 (e) as allegedly being anticipated by either U.S. Patent No. 6,546,875 to Vaughn et al. (Vaughn) or U.S. Patent No. 6,371,029 to Beal (Beal '029). This rejection is hereinafter traversed and reconsideration is respectfully requested for the following reason.

Similar to Beal '313 discussed above, both Vaughn and Beal '029 fail to teach or suggest a jacket having a *closed end forming a nose of the bullet*, with the first core *having a front surface conforming to an interior surface of the nose*, as is recited in Applicant's claim 24. Vaughn teaches a hollow point bullet, where the jacket 15 has an open tip. Beal '029, teaches a disc 106 or 138 (FIGs. 12, 14, and 15) disposed at an open end 116 or 132 of the jacket 108 or 128 to form the leading end of the projectile. Accordingly, both Vaughn and Beal '029 fail to teach or suggest each and every limitation of Applicant's claim 24. Applicant respectfully requests that the rejection of claim 24, and dependent claim 25, under 35 U.S.C. 102(b) as being anticipated by Vaughn or Beal '029 be reconsidered and withdrawn.

F. Rejections Under 35 U.S.C. 103(a)**1. Claim 25**

Claim 25 stands rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over either Beal '313, Beal '029, or Vaughn in view of PCT WO 97/20185 to Valdez et al. (Valdez). More specifically, the Examiner alleges that if Beal '313, Beal '029 and Vaughn do not perform the function of claim 25, then Valdez clearly teaches that it is old and well known in the art to vary the characteristics of a bullet so that it will not defeat level 2 body armor. Moreover, the Examiner alleges that it would have been obvious to one having skill in the art at the time the invention was made to vary the characteristics of either the Beal '313 bullet, the Beal '029 bullet or the Vaughn bullet so that the bullets will not defeat level 2 body armor in view of the teaching of Valdez. This rejection is hereinafter traversed and reconsideration is respectfully requested for the following reasons.

8 of 11

Serial No. 10/010,009
Dual Core Ammunition
Inventor: Henry J. Halverson
Attorney Docket No. 102167-200
Timothy J. Olson Reg. N .: 42,962
Dir. Tel. 860-297-3700
\\12868\\8\\437971.1

First, regarding the combination of Beal '029 or Beal '313 with Valdez, one skilled in the art would not be motivated to vary the characteristics of either the Beal '313 bullet or the Beal '029 bullet so that they will not defeat level 2 body armor in view of the teaching of Valdez. Both the Beal '313 and the Beal '029 bullets are designed to *enhance penetrating power*. See, e.g., Beal '313 at Col. 4, lines 8-11, lines 45-50, lines 62-64, Col. 5, lines 20-24, Col. 8, lines 57-64; also, see, e.g., Beal '029 at Col. 7, lines 40-55. One skilled in the art would not be motivated to modify the Beal '313 or the Beal '029 bullets, which are designed to enhance penetrating power, so that they will not defeat level 2 body armor. Accordingly, the Examiner's rejection of claim 25 as allegedly being obvious over Beal '313 or Beal '029 in view of Valdez is improper and should be withdrawn.

Second, regarding the combination of Vaughn with Valdez, one skilled in the art would not be motivated to modify the bullet of Vaughn to arrive at the specific type of bullet recited in Applicant's claim 24, from which claim 25 depends. Indeed, Vaughn teaches away from a bullet including *a jacket having a closed end forming a nose of the bullet*, with the first core having a front surface conforming to an interior surface of the nose. For example, Vaughn recites:

Full-metal jacket and "soft point" bullets are not favored for use by law enforcement and security forces. These designs do not readily expand in soft targets and thus over penetrate. ... Law enforcement and other security and protective forces prefer to use "hollow-point" (HP) bullets to overcome these issues. (Col. 1, lines 42-51).

Thus, Vaughn teaches away from a bullet of the type recited in Applicant's claims: *a jacket having a closed end forming a nose of the bullet*. Accordingly, one skilled in the art would not combine Vaughn with Valdez to arrive at Applicant's claimed invention, and, for at least this reason, the Examiner's rejection of claim 25 as allegedly being obvious over Vaughn in view of Valdez is improper and should be withdrawn.

2. Claim 26

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over either

9 of 11

Serial No. 10/010,009
Dual Core Ammunition
Inventor: Henry J. Halverson
Attorney Docket No. 102167-200
Timothy J. Olson Reg. No.: 42,962
Dir. Tel. 860-297-3700
\\12868\\8\\437971.1

Beal '313, Beal '029, or Vaughn in view of U.S. Patent No. 5,399,187 to Mravic et al. (Mravic). More specifically, the Examiner alleges that to substitute the tungsten-filled polymer core of Mravic for the tungsten core in either the Beal '313 bullet, the Beal '029 bullet or the Vaughn bullet would have been obvious to one having ordinary skill in the art at the time the invention was made. This rejection is hereinafter traversed, and reconsideration is respectfully requested for the following reasons.

As described above, Beal '313, Beal '029, and Vaughn fail to teach or suggest a jacket having a *closed end forming a nose of the bullet*, with the first core *having a front surface conforming to an interior surface of the nose*, as is recited in Applicant's claim 24, from which claim 26 depends. Mravic fails to cure these deficiencies. Accordingly, neither Beal '313, Beal '029, Vaughn, nor Mravic, alone or in combination, teach or suggest each and every limitation of Applicant's claim 26. For this reason, Applicant respectfully requests that the rejection of claim 26 under 35 U.S.C. 103(a) as being unpatentable over either Beal '313, Beal '029, or Vaughn in view of Mravic be reconsidered and withdrawn.

3. Claim 27

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Beal '313 or Vaughn. More specifically, the Examiner alleges that it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the weight of the bullets of Beal '313 or Vaughn to achieve an optimum result. This rejection is hereinafter traversed, and reconsideration is respectfully requested for the following reasons.

As described above, Beal '313 and Vaughn fail to teach or suggest a jacket having a *closed end forming a nose of the bullet*, with the first core *having a front surface conforming to an interior surface of the nose*, as is recited in Applicant's claim 24, from which claim 27 depends. Accordingly, Applicant respectfully requests that the rejection of claim 27 under 35 U.S.C. 103(a) as being anticipated by Beal '313 and Vaughn be reconsidered and withdrawn.

10 of 11

Serial No. 10/010,009
Dual Core Ammunition
Inventor: Henry J. Halverson
Attorney Docket No. 102167-200
Timothy J. Olson Reg. No.: 42,962
Dir. Tel. 860-297-3700
\\12868\\8\\437971.1

G Conclusion

It is believed that the foregoing remarks are fully responsive to the Office Action and that claims 24-29 are in condition for allowance. Accordingly, reconsideration and allowance is respectfully requested.

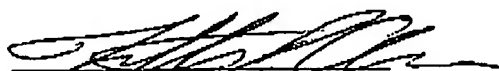
If the Examiner has any questions or believes that a discussion with Applicant's attorney would expedite prosecution, the Examiner is invited and encouraged to contact the undersigned at the telephone number below.

The Examiner is hereby authorized to apply any credits or charge any deficiencies related to this Amendment to our Deposit Account No. 23-1665.

Please apply any credits or charge any deficiencies to our Deposit Account No. 23-1665.

Respectfully submitted,
Henry J. Halverson.

Date: February 4, 2004



Signature of Attorney
Timothy J. Olson
Reg. No. 42,962
WIGGIN & DANA LLP
One City Place
185 Asylum Street
Hartford, CT 06103-3402
Telephone: (860) 297-3709
Facsimile: (860) 525-9380

11 of 11

Serial No. 10/010,009
Dual Core Ammunition
Inventor: Henry J. Halverson
Attorney Docket No. 102167-200
Timothy J. Olson Reg. No.: 42,962
Dir. Tel. 860-297-3700
\\12868\8\437971.1